



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to  
Implement the Commission's  
Procurement Incentive Framework and  
to Examine the Integration of  
Greenhouse Gas Emissions Standards  
into Procurement Policies.

R.06-04-009

**The California Energy Commission**

**Docket 07-OIIP-01**

**REPLY COMMENTS OF THE DIVISION OF RATEPAYER ADVOCATES  
ON THE ADMINISTRATIVE LAW JUDGES' RULING ON TYPE AND POINT  
OF REGULATION ISSUES**

Pursuant to the November 9, 2007 "Administrative Law Judges' Ruling Requesting Comments on Type and Point of Regulation Issues",<sup>1</sup> the Division of Ratepayer Advocates (DRA) submits the following reply comments on the general type and point of regulation for reducing greenhouse gas (GHG) emissions in the electricity sector.

**I. INTRODUCTION**

In opening comments, DRA supported further investigation into Western Resource Advocates' (WRA's) proposed CO<sub>2</sub>RC method. Few other parties provided comments on this method or any indication that they have considered the CO<sub>2</sub>RC proposal at all. The WRA proposal presents an opportunity to avoid many of the challenges of the other regulation methods. DRA reiterates its belief that the CO<sub>2</sub>RC proposal warrants further consideration.

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<sup>1</sup> Administrative Law Judges' (ALJ) Ruling Requesting Comments on Type and Point of Regulation Issues (ALJ Ruling), November 9, 2007. A subsequent November 30 ALJ ruling extended the deadline for reply comments from December 12 to December 17.

Based on parties' comments on the alternative points of regulation, DRA believes source-based to be the strongest candidate. Several parties raised concerns about legal issues under AB 32 and leakage, but DRA believes these concerns are overstated. The source-based approach appears consistent with the overall goals of AB 32, and the asserted drawbacks (i.e., leakage) are problems that are common to all regulatory options in the absence of regional or national regulation of GHG emissions. A source-based approach, moreover, appears to have fewer problems with contract shuffling than a load-based system. DRA's support of the source-based approach for emissions in the electric sector is therefore coupled with strong support for California's striving with other members of the Western Climate Initiative (WCI) to implement regional GHG controls as soon as possible.

Parties' comments support the notion that the load-based approach is the least desirable option. As parties pointed out, the load-based approach has high transaction costs and will be more difficult to integrate into a national/regional system. The opening comments support the elimination of the load-based approach from further consideration. DRA believes that the Commission should, at the very least, begin eliminating inferior options in order to better focus on the implementation details of the remaining options and to refine the E3 modeling efforts as necessary.

These reply comments address the following areas: (a) AB32 legal issues of the source-based approach, (b) concerns with the load-based approach, (c) and discussion of the CO<sub>2</sub>RC approach.

## **II. DISCUSSION**

### **A. A source-based approach complies with AB 32.**

Some parties asserted that the source-based approach was not consistent with AB32. The primary concerns of these parties were that this approach would (a) not account for imports, as required by AB32, and (b) would not minimize leakage, also required by AB32. DRA respectfully disagrees with these assertions.

Southern California Edison (SCE),<sup>2</sup> Calpine,<sup>3</sup> the Energy Producers Coalition/Cogeneration Association of California (EPAC/CAC),<sup>4</sup> the National Resources Defense Council (NRDC)/ the Union of Concerned Scientists (UCS),<sup>5</sup> and the Green Power institute (GPI)<sup>6</sup> assert that the source-based approach would not meet AB32's requirements to account for imports. However, AB32 requires that California track emissions from electricity imports,<sup>7</sup> but does not require that the state actually reduce emissions from imports or include them in a cap-and-trade system. As long as electricity sector reduction goals are met, it does not matter whether those reductions came from in-state or out-of-state electricity generation. The Commission has already established a reporting and tracking protocol for emissions associated with native load and imports.<sup>8</sup>

Additionally, it is important to note that a source-based approach does not mean that emissions imports will be ignored; they simply would not be included in a cap-and-trade system at least until such a system became region or nationwide. Load-serving entities (LSEs) would be required to aggressively pursue energy efficiency while simultaneously meeting the renewable portfolio standard (RPS) and the California Solar Initiative (CSI) that will reduce GHG emissions, regardless of the fact that they use both imported and California-generated electricity.

NRDC/UCS, SCE, and Calpine stated that the source-based approach would be inconsistent with AB32 because it would not minimize leakage. However, leakage is a problem facing all point of regulation options, and is not unique to the source-based approach. While some leakage is likely in the short term, this leakage would not cause a source-based system to be out of compliance with AB32. As discussed in the following

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<sup>2</sup> SCE Opening Comments, pp. 7-8

<sup>3</sup> Calpine Opening Comments, p. 8.

<sup>4</sup> EPUC/CAC, p.3.

<sup>5</sup> NRDC/UCS Opening Comments, p. 10.

<sup>6</sup> GPI Opening Comments, p. 6

<sup>7</sup> Health and Safety Code Section 38530(b)(2).

<sup>8</sup> D.07-09-017.

section, the extent of leakage under a source-based system is likely matched by the amount of contract shuffling under a load-based system, with the overall achievement of net GHG reductions being similar. Also, as discussed in its opening comments, DRA believes that transmission constraints will limit leakage in the short-term. In the medium- and long-term, it is likely that a regional or national system will come into effect, thereby eliminating these leakage concerns. Additionally, as NRDC/UCS points out, many electricity-related GHG reductions will likely come from outside the cap-and-trade program, from energy efficiency and RPS programs already in place.<sup>9</sup> The fact that most of the GHG reductions in the electricity sector will come from programmatic measures, rather than from a cap and trade program would further lessen the impact of leakage.<sup>10</sup>

**B. The Load-Based Approach should be ruled out as a feasible point of regulation for the electricity sector.**

A number of parties in their opening comments supported a load-based approach.<sup>11</sup> These parties argue that a load-based approach minimizes emission leakage, as well as total cost to end users when emission allowances are concurrently allocated to the retail providers. They also contend that a load-based approach would place more pressure on retail providers to promote energy efficiency and renewable energy and that implementation is less likely to be delayed because of legal challenges.

DRA disagrees that any of these arguments support implementation of a load-based approach. Contract shuffling is as much of an issue to a load-based approach as

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<sup>9</sup> NRDC/UCS Opening Comments, p. 3.

<sup>10</sup> Assume that 50% of the GHG reductions attributed to a cap-and-trade program will be counteracted by leakage. If 80% of the GHG reductions from the electricity sector is attributed to programmatic measures, and 20% from a cap-and-trade program, then leakage reduces the total emissions reductions by 10%.

<sup>11</sup> Parties supporting a load-based approach include the Los Angeles Department of Water and Power, Sacramento Municipal Utility District, Southern California Public Power Authority, GPI and NRDC. NRDC also considers the first-seller and hybrid approach as workable options for implementing a cap-and-trade program for the electricity sector.

emissions leakage is to a source-based approach. As pointed out in an opinion paper<sup>12</sup> issued by the Market Surveillance Committee (MSC) on November 27, 2007 (“MSC paper”), under a load-based system, “firms would not be able to avoid compliance by physically moving their sources of production out of the State (‘leakage’); [however,] they would be able to achieve much the same ends by ‘reshuffling’ their purchases of imported energy to originate from clean sources. *In fact, reshuffling is in many ways a less costly strategy for circumventing environmental regulation than is leakage.*”<sup>13</sup>

Regarding the issue of ratepayer cost impacts, the authors of the MSC paper demonstrated that a load-based system and a source-based system have similar cost impacts to ratepayers, with the underlying assumption that emission allowances are allocated to the retail providers on behalf of ratepayers under a source-based system, and can in turn be sold to generators.<sup>14</sup> Under a source-based approach, if allowances are given for free to generators, this will result in increased generator profits, or windfall.<sup>15</sup> In contrast, the revenue resulting from the sale of allowances to generators could be returned to ratepayers. This “point of allowance distribution” is an important condition for implementing a source-based system. The MSC paper explains that because a load-

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<sup>12</sup> Opinion on “Load Based and Source-Based Trading of Carbon Dioxide in California,” by Wolak, Bushnell and Hobbs, Market Surveillance Committee of the California ISO, November 27, 2007. ). The California Independent System Operator filed the paper in its opening comments.

<sup>13</sup> *Id.*, p.2. (*emphasis added*).

<sup>14</sup> *Id.*, pp.4-5.

<sup>15</sup> The Center for the Study of Energy Markets (CSEM) recently published a paper titled “Incomplete Environmental Regulation, Imperfect Competition, and Emission Leakage” by Meredith Fowlie. (December 2007) The paper analyzes emission leakage in an incompletely regulated and imperfectly competitive industry and concludes that incomplete regulation of GHG gas emissions that exempts out-of-state producers would achieve only a third of the reductions that would result under complete regulation, and would cost almost three times as much as under complete regulation. The analysis supports DRA's position that it is important for California to work with other members of the Western Climate Initiative to implement regional regulation as soon as possible. DRA does not believe that the paper supports use of a load-based approach, because it fails to consider the impacts of contract-shuffling under a load-based approach. Instead, it demonstrates that to achieve the optimal results, all generators should be regulated.

based system will interfere with the smooth functioning of the CAISO day-ahead and real-time markets, generator dispatch would likely be sub-optimal and therefore it would result in higher ratepayer costs than a source-based system. DRA agrees with the analysis and conclusions of the MSC paper.

Other parties also pointed out key problems associated with a load-based approach. Pacific Gas and Electric Company (PG&E) concluded that none of the options presented in the ALJ's rulings for matching a retail provider's load to the sources of electricity used to serve the load would likely be effective, "because none of the options addresses the fact that Western power markets rely to a large extent on imports and exports of unspecified energy that are untraceable from the load to a specific unit or source."<sup>16</sup> Van Horn Consulting stated that "the need to use imputed GHG emissions to characterize many electric power transactions that originate out-of-state will mask market signals and give rise to gaming opportunities for higher emitting generators."<sup>17</sup>

Given that a regional cap and trade program for the Western Climate Initiative member states will likely be launched within the next five years,<sup>18</sup> DRA recommends that the Joint Commissions support a point-of-regulation for the electricity sector that will fit into a regional or national scheme. As pointed out by PG&E, a load-based system becomes almost impossibly complex under a national or regional regime. "All of the states will have to agree on the methodologies to determine the emissions value of power imported and exported."<sup>19</sup> DRA respectfully requests that the Joint Commissions rule out a load-based system as a feasible point of regulation for the electricity sector.

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<sup>16</sup> PG&E Opening Comments, p.7.

<sup>17</sup> "A Comparison of Three Cap and Trade Market Designs and Incentives for New Technologies to Reduce Greenhouse Gases," Van Horn Consulting, November 15, 2007.

<sup>18</sup> The WCI has established an aggregate GHG reduction goal of 15% below 2005 levels by 2020. At an individual state level, Oregon, Manitoba and Washington have set goals that are as, if not more, aggressive as California. While no launch date for a WCI cap-and-trade program has been announced, a cap-and-trade program design for the WCI member states is expected to be completed by August 2008.

<sup>19</sup> PG&E Opening Comments, p.6.

### **C. WRA's CO<sub>2</sub>RC methodology warrants review and consideration by the Commission**

With the exception of Independent Energy Producers (IEP), parties did not provide any evaluations or recommendations of the WRA proposal. Like DRA, IEP believes that the CO<sub>2</sub>RC methodology merits consideration by the Commission despite its eleventh hour appearance at this critical juncture of the proceeding. For the most part, the point of regulation cost-benefit analysis is clouded by the uncertainty of the timelines and framework for a regional system. Acting alone in the interim, California's point of regulation options tend to weigh in at "six of one, half-dozen of the other" in terms of their cost-benefit calculation, give or take. However, DRA would prefer a system that does not heavily depend on Herculean efforts for tracking of emissions or compliance enforcement, and the load-based and first-seller systems are unfortunately at a greater risk of failing to meet these requirements or to prevent gaming. The CO<sub>2</sub>RC methodology appears capable of minimizing these complexities, and as such should be given substantial weight in the process of selecting a final point of regulation. DRA reiterates that the Commission should ensure that adequate commentary is solicited from parties on this compelling proposal.

### **III. CONCLUSION**

DRA respectfully requests that the Joint Commissions consider its opening and reply comments in determining the point of regulation for compliance with GHG requirements. DRA believes that the CO<sub>2</sub>RC method described by WRA is worthy of further consideration, but if the Joint Commissions disagree, DRA recommends adoption of a source-based point of regulation, while continuing strive to implement a regional system of GHG emissions control with other members of the WCI as well as ongoing emphasis on existing programs that will reduce GHG emissions.

Respectfully submitted,

/s/ Diana L. Lee

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Dated: December 17, 2007



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